

Amendments to the Specification:

Please insert the header "BACKGROUND OF THE INVENTION" before the first paragraph at page 1 of the specification as originally filed.

Please insert the header "Field of the Invention" in between the paragraph added in the Preliminary Amendment filed September 21, 2006, and the first paragraph at page 1 of the specification as originally filed.

Please insert the header "Description of the Related Art" between the paragraphs at page 1, lines 16-17 and lines 18-32 of the specification as originally filed.

Please insert the header "SUMMARY OF THE INVENTION" before the first complete paragraph at page 5, line 3 of the specification as originally filed.

Please amend the paragraph at page 7, lines 26-32 of the specification as originally filed, as follows:

In the suggested design of the aberrometer, the modified Badal's system (refraction compensator) is used for compensating second-order aberrations (defocusing and astigmatism), a system consisting of two cylindrical lenses of opposite signs ~~and~~ or two toric lenses of opposite signs, wherein the two cylindrical or two toric (or one toric and one cylindrical) lenses (an astigmatism compensator) are located at ~~the level of~~ the image plane of the input pupil and a system for the precise measurement of the displacements (position sensor) of the movable elements (the displacement of prisms and mirrors in the Badal's system and the turning angles of lenses).

Please amend the paragraph at page 9, lines 16-17 of the specification as originally filed, as follows:

For a cylindrical waveform to be formed, in case the patient's eye creates distortions that must be compensated, an additional spherical correction is introduced by moving lens ~~7b~~ 7d.

Please insert the header "BRIEF DESCRIPTION OF THE DRAWINGS" after the last complete paragraph at page 11, lines 26-31 of the specification as originally filed.

Please insert the header "DETAILED DESCRIPTION" before the first complete paragraph at 12, line 10 of the specification as originally filed.

And please amend the abstract on page 24 as follows:

Abstract

~~The group of inventions is used for a medical clinical practice~~ An aberrometer is provided for automatically measuring a human eye abberation, determining a subjective visual acuity associated with the selection of a best spherocylindrical correction, and investigating the influence of high orders aberrations on the visual acuity ~~and for prognosticating the eye correction results.~~ The ~~inventive~~ aberrometer ~~comprises~~ includes a point light source which is projected on the eye retina, ~~and forms a virtual source thereon whose radiation is dispersed~~ scattered back by ~~said the~~ retina, and passes through the

eye optical systems acquiring a phase modulation corresponding to the total eye optical aberration. ~~Said~~
~~The~~ aberrometer also ~~comprises a system for measuring the~~
~~shape of the radiation wave front coming out from the eye~~
~~which is embodied in the form of~~ includes a wave front sensor whose output signal is transmitted to a device control system, an aberration compensation system which is disposed between the human eye and the wave front sensor ~~and~~
~~an measuring system~~ and through which ~~the~~ radiation coming out from the eye and projected on the eye retina ~~of the~~
~~virtual source~~ passes, and a test picture projector which projects the test picture image on the eye retina through
the aberration compensation system. ~~In the particular~~
~~embodiments, said aberrometer is provided with an additional~~
~~adjusting, self-calibrating and self-testing system, wherein~~
~~the aberrometer control system can be complemented with a~~
~~microprocessor controller. The inventive method for setting~~
~~the aberrometer consists in establishing a required distance~~
~~between the device and a patient eye by illuminating the~~
~~eye, in projecting a mark picture on the iris thereof and in~~
~~visually observing the relative positions of the projected~~
~~mark pictures and the three-dimensional displacement of the~~
~~device and/or the eye with respect thereto~~